

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled).
2. (Currently Amended) A method for illuminating an object, said method comprising: Method according to Claim 1, further comprising the step:
generating a light beam with a laser;
adjusting the pulse width of the light pulses of the light beam;
injecting the light beam into an optical element which spectrally broadens the light of the light beam; and
shaping the spectrally broadened light beam to form an illumination light beam.
3. (Currently Amended) A method for illuminating an object, said method comprising: Method according to Claim 1,
generating a light beam with a laser;
injecting the light beam into an optical element which spectrally broadens the light of the light beam; and
shaping the spectrally broadened light beam to form an illumination light beam,

wherein the optical element is made ~~consists~~ of photonic band gap material.
4. (Canceled).
5. (Canceled).

6. (Currently Amended) An illuminating instrument comprising: a laser that emits a light beam, an optical element that spectrally broadens the light from the laser and an optical means for shaping the spectrally broadened light into an illumination light beam, ~~Illuminating instrument according to Claim 5,~~

wherein the optical element is made ~~consists~~ photonic band gap material.

7. – 12. (Canceled)

13. (Original) A microscope comprising: an objective through which a sample can be illuminated and detected, the objective being arranged in both an illumination beam path and a detection beam path, an illumination pinhole being arranged in the illumination beam path, a detection pinhole being arranged in the detection beam path, an optical component arranged in the illumination beam path, which generates spectrally broadened illumination light, and an essentially polarization-independent and wavelength-independent beam splitter, which is arranged in a fixed position in the illumination beam path and the detection beam path.